

Board Chairperson
Mr. Kevin O'Rell
The National Organic Standards Board
c/o Katherine Benham,
Room 4008 – South Building; 1400 and Indep. Ave.
SW Washington CC 20250-0001

San Jose, March 28th, 2006.

Sent to: Katherine.Benham@usda.gov by E-mail and by fax to 001-(202) 205-7808

Dear Katherine

My name is Frans Wielemaker, I am the manager of the Organic Program of Dole Fresh Fruit International in San Jose, Costa Rica. I am sending you this letter as a petition for maintaining the use of horticultural oils for disease and insect control in sections 601 (601 i-6) and (601 e-5) respectively of the NOP regulations. In other words I support the boards' recommendation for the continued use of horticultural oil. I do this in the interest of our company and organic banana growers in Central and South America and the Caribbean as they use horticultural oil to control a very devastating leaf disease called Sigatoka and certain insects in bananas.

The greatest advance in the control of the Banana Leaf Spot Disease called Sigatoka was made possible through the discovery of control practices based on horticultural oil. The same can be said about Greasy Spot Disease control of Citrus in the United States of America. Oil acts as a fungistatic to the pathogens' by reducing germination, germ tube growth and appressorium formation of the fungal spores ("Bananas", 1999, Edited by D. Jones). Mineral oil also "alters the leaves' physiology, reducing the sugar level, thus protecting against the disease" (The Organic Method Primer, 1993, Edited by B and G Rateaver).

When populations of common pests like whiteflies, scales, mites, aphids and thrips get out of hand, the application of a horticultural oil diminishes their incidence. Several of these insects transmit plant virus and others are problematic quarantine bugs and therefore can signify great economic losses to organic growers. The oil applications do not kill all the harmful insect population nor the beneficial insects as the mode of action is based on feeding habit change of only the insects in contact with with the horticultural oil (Spray Oils Beyond 2000, 1999, Edited by A. Beattie).

Effective horticultural oils have a tailored boiling range to avoid phytotoxicity to the crop and avoid harm to the environment making them even safer than before (Comparison of distinct distillation ranges and commercial spray oils, Wielemaker, F, 1992). Horticultural Oils are considered safe when used appropriately and are listed under the EPA list #3 with the Signal Word: Caution. They are at present not only allowed by the NOP but also allowed in organic production according to both the Japanese JAS and the European EU 2092/91 regulations. The FAO (referred to as Parafinic oils) and IFOAM (referred to as mineral oils) organic regulations also allow the use of horticultural oil. More importantly the use of horticultural oil is expressively mentioned as being exempted from prohibition in OFPA in section 6517 (or 2118) C-1-B.

Some vegetable based oils function to make synthetic systemic fungicides and insecticides penetrate the leaf surface when used in conventional agriculture, but this is not applicable for our objective in organic agriculture as we look for effectiveness of the oil by itself, not as a penetrant. Also some vegetable oils have been said to act as an insecticides like Neem oil and Castor Bean oil, but it is precisely the fact that horticultural oil is not an insecticide which makes it so unique that is of interest to us.

Back in 1992 in Costa Rica, I myself compared horticultural oil with several vegetable oils like palm oil, sunflower oil, corn oil and peanut oil, for Sigatoka control but none of these vegetable oils showed any activity when used without synthetic fungicides. The horticultural oil plot, however, clearly showed the superior control activity as compared with the unsprayed control plot (Evaluation of vegetable oils, Wielemaker, F, 1993).

A study comparing the effectiveness of horticultural and vegetable oil formulations for the control of Sigatoka in Queensland, Australia, also came to the conclusion that vegetable oil treatments did not provide commercially acceptable levels of control while horticultural oil treatments provided superior control. In this trial a tea-tree oil treatment also failed to control the disease. (Comparing horticultural oils, 2002, L. Vawdrey, et al).

In a recent study reported in the proceedings of the "International Congress on Black Sigatoka Management in Banana and Plantain in Latin America and the Caribbean" held in Costa Rica a week ago on March 21, 2006, the vegetable oils tested in a study by the National Banana Research Station in La Rita of CORBANA in Costa Rica, again showed that studies with vegetable oils still have a long way to go before they can give effective Sigatoka control (Evaluation of wax and oil palm oil, 2006, I. Martinez, et al).

I am curious to read the scientific evidence on which one Sun Set petitioner based his claim that alternatives to horticultural oils exist for the control of diseases and pests. I have not come across any evidence or reference in the case of bananas, and for that matter in citrus, or crops that use horticultural oil in general. Believe me, if an alternative existed it would be adopted immediately as the incentive to move to something different than horticultural oil due to the high cost of petroleum certainly would be welcomed and implemented.

Therefore, I agree with and fully support the NOSB Crops Committee recommendation concerning the continued use of horticultural oil for disease and insect control for organic food production and thus the continued listing of horticultural oil on the National List of Allowed Substances of the NOP.

Could you please see to it that AMS-NOP Director Mr. Arthur Neal and AMS-NOP Administrator Mark Bradley also receive a copy of this E-Mail and letter.

Thank you very much for your attention,

Frans Wielemaker
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Copies to:

- 1) NOSB Board Chairman: Kevin O'Rell at kevino@horizonorganic.com
- 2) NOSB Crops Committee members Gerald Davis, Rigoberto Delgado, Kevin Engelbert, Jeffrey Moyer, Nancy Ostiguy at NOSB.crops@usda.gov

